Hat Trick

OWNERS AND SERVICE MANUAL

INNOVATIVE CONCEPTS IN ENTERTAINMENT INC.

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SAFETY AND WARNINGS

BEFORE YOU BEGIN

WARNING: WHEN INSTALLING THIS GAME, A GROUNDED A.C. RECEPTACLE MUST BE USED. FAILURE TO DO SO COULD RESULT IN INJURY TO YOURSELF OR OTHERS. FAILURE TO USE A GROUNDED RECEPTACLE COULD ALSO CAUSE IMPROPER GAME OPERATION, OR DAMAGE TO THE ELECTRONICS. DO NOT DEFEAT OR REMOVE THE GROUNDING PRONG ON THE POWER CORD FOR THE SAME REASON AS GIVEN ABOVE. USING AN IMPROPERLY GROUNDED GAME COULD VOID YOUR WARRANTY. HAVE A QUALIFIED ELECTRICIAN CHECK YOUR A.C. RECEPTACLE TO BE SURE THE GROUND IS FUNCTIONING PROPERLY. DO NOT WASH YOUR GAME WITH A PRESSURE WASHER.

AVERTISSEMENT: lors de l'installation de ce jeu, la terre AC récipient doit être utilisé. Ne pas le faire pourrait entraîner un préjudice à vous ou à d'autres. Le non-recours à la terre récipient pourrait également causer une mauvaise opération de jeu, ou les dommages causés à l'électronique. NE PAS détériorer ou de retirer la broche de terre sur le cordon d'alimentation pour la même raison, comme indiqué ci-dessus. Indûment l'aide d'un jeu de la terre pourrait annuler votre garantie. Ont un électricien qualifié de vérifier votre récipient AC pour s'assurer que le sol fonctionne correctement. Ne lavez pas votre jeu avec une laveuse à pression.

INSTALLATION

The game comes ready to play with just a few simple things to keep in mind.

1. Plug the game into the A.C. outlet and turn on power to the game through the inside of the game next to the main board assembly. See assembly drawings for location.

THIS GAME IS DESIGNED TO DISSIPATE STATIC ELECTRICITY THROUGH THE GROUNDING PLANE OF THE GAME. IF THE A.C. GROUND DOES NOT WORK, THE GAME COULD DISCHARGE STATIC ELECTRICITY THROUGH THE GAME CIRCUITRY, WHICH COULD CAUSE DAMAGE.

2. Make sure the game is level after installation. It is necessary to make sure the game is level for safety concerns.

3. Check that the A.C. voltage rating on the back of the game matches the A.C. voltage of your location.

THE POWER SUPPLY IS NOT VOLTAGE ADJUSTABLE. TO OPERATE THE GAME AT VOLTAGES OTHER THAN THOSE IT WAS DESIGNED FOR. PLEASE CONTACT OUR SERVICE DEPARTMENT FOR VOLTAGE CONVERSION INFORMATION.

WARNING

DO NOT remove any of the components on the main board (e.g. compact flash and eproms) while the game is powered on. This may cause permanent damage to the parts and the main board. Removing any main board component part while powered on will void the warranty.

Ne retirez pas l'un des composants sur la carte principale (par exemple Compact Flash et EPROMs), tandis que le jeu est sous tension. Cette mai causer des dommages permanents aux parties et la carte principale. Suppression de tout bord principal élément sous tension alors que annulera la garantie.

NOTE: THIS GAME IS INTENDED FOR INDOOR USE ONLY.
SHOCK HAZARD - DO NOT OPEN. REFER SERVICING TO SERVICE PERSONNEL.

REMARQUE: CE JEU EST DESTINÉ POUR USAGE À L'INTÉRIEUR SEULEMENT.
AVERTISSEMENT: RISQUE DE CHOC - NE PAS OUVRIR. RÉPARATION À UN PERSONNEL DE SERVICE.

Game Settings and Adjustments

Your game has been shipped with our recommended defaults for optimal earnings. We have included extra decals located in your parts package in case you would like to alter the game settings for your location. To clear audit data press and hold the "UP" button located on the test panel and turn the AC power switch on. The display will display a random pattern until you release the "Up" button. The game will then clear its audits and reset back in game mode. To reset your game back to factory default settings, press and hold "reset" button located on the test panel and turn the AC power on. The display will display a random pattern until you release the "reset" button. The game will revert to default settings and reset back to game mode.

At anytime you can press the "MODE" button located on the test panel to enter programming. Each time you press the "MODE" button, you advance to the next option. Each option can be changed by either pressing the "UP" or "DOWN" button also located on the test panel. The game will automatically save the change when you press the mode button to advance to the next option.

Option	Description	Values	Default
1	Hit Score	2 to 50	15
2	Hit Score	2 to 50	5
3	Hit Score	2 to 50	30
4	Hit Score	2 to 50	10
5	Hit Score	2 to 50	20
6	Jackpot Score	50 to 400 (increments of 50)	150
7	Wheel Speed control	400 to 500 (increments of 20)	440
8	Demo Sound 0=all the time 1=each time the coin is inserted	0 or 1	1
9	*Display total ticket payout - See Audits below*		
10	*Display total number of coins - See Audits below*		
11	Mercy Ticket in Out Hole	0 to 10	1
12	Locked value of Jackpot score	50 to 1000 (increments of 50)	1000
13	Mercy Ticket for Coin in	0 to 5	0
14	*LED Stadium Lights - See diagnostics below*		
15	Limit Switch Tests - *See diagnostics below*		
16	Number of coins outputted by hopper per card swipe.	0 to 50	10
17	Return to game mode, press "reset" located on main pcb.		

Audits

Option 9 will display the total amount of tickets paid out. This option can be cleared as described above.

Option 10 will display the total amount of coins in. This option can be cleared as described above.

Test

Option 14 allows you to toggle the LED stadiums lights to ensure each LED is on. Pressing the "UP" button will turn all LED on and pressing the "DOWN" button will turn them off.

Test *(Continued)*

Option 15 allows you to test the limit switches found in all the coin out holes. They are called "Home Run Hole", "Hit Hole", and "Out Hole". When a limit switch is defective, the display will show the hole with the defective switch and the station number. The station numbers are 1 for red, 2 for blue, and 3 for yellow. A display of "Ho" means home run hole, a display of "Ht" means Hit hole, and a display of "Ot" means out hole. This error display can occur when game is first powered up if a switch is "stuck" on. ***The game will not function until you enter programming and cycle through to option 16 or replace the defective switch.***

Error Codes

At any time during game play, if a error occurs, the following will be displayed:

TICKET ERRORS:

After loading tickets, press the "Ticket Button" to dispense remaining tickets owed.
"Err1" appears on the Jackpot display. This means no ticket in ticket dispenser 1.
"Err2" appears on the Jackpot display. This means no ticket in ticket dispenser 2.
"Err3" appears on the Jackpot display. This means no ticket in ticket dispenser 3.

SENSOR ERRORS:

"ErrC" appears on the Jackpot display. This means the count sensor has failed.
"ErrZ" appears on the Jackpot display. This means the Home sensor has failed.
"ESSS" appears on the Jackpot Display. This means both sensors have failed.

A note on Sensor Failures:

The game expects a steady pulse from the count sensor and when the playfield has gone a full revolution a pulse is received by the home sensor. If after a period of time the home sensor is not seen, the game will display the "ErrZ" error. Ensure that the home sensor flag triggers the top sensor when a full revolution is done. If the playfield is not turning smoothly, this will cause the count sensor to become erratic and display a "ErrC" on the jackpot display. Check underneath the playfield to ensure that none of the brackets are moving or have become loose. It might be necessary to remove one coin chute above the coin drawer to access the assembly. Please refer to the assembly diagrams for details. Total sensor failure will display a "ESSS" meaning it cannot see both the count sensor or home sensor. Check to ensure there is no physical damage to the sensor has occurred.

COIN SWITCH ERRORS:

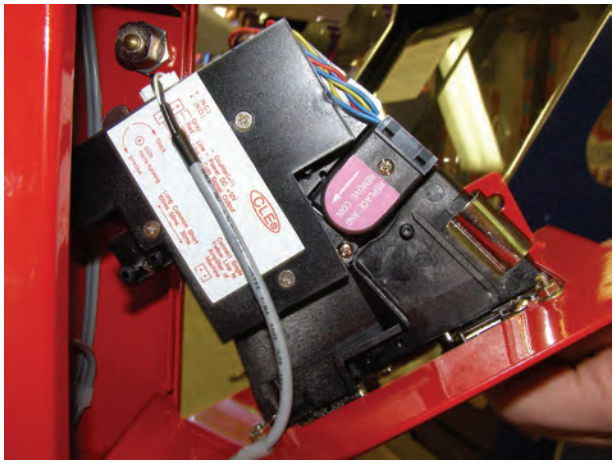
When the game is powered on it will self check for stuck switches before entering game mode. If any switch is found to be stuck, the game will display the error switch location code and will not enter game mode. You can force the game into game mode by pressing mode button 16 times if it is not possible to repair at that time. It is highly recommended to attended to this error as soon as possible.

"Ho1" appears on the jackpot display. Defective switch located in the "Home run hole" on red station.
"Ho2" appears on the jackpot display. Defective switch located in the "Home run hole" on blue station.
"Ho3" appears on the jackpot display. Defective switch located in the "Home run hole" on yellow station.
"Ht1" appears on the jackpot display. Defective switch located in the " Hit hole" on red station.
"Ht2" appears on the jackpot display. Defective switch located in the "Hit hole" on blue station.
"Ht3" appears on the jackpot display. Defective switch located in the "Hit hole" on yellow station.
"Ot1" appears on the jackpot display. Defective switch located in the "Out hole" on red station.
"Ot2" appears on the jackpot display. Defective switch located in the "Out hole" on blue station.
"Ot3" appears on the jackpot display. Defective switch located in the "Out hole" on yellow station.

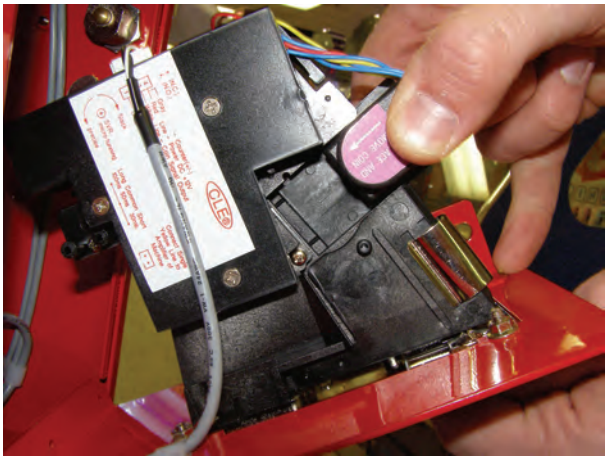
SETUP - ASSEMBLY

This game has three stations that require you to insert your game room token or the coin you wish to use into each of the coin comparators before they will accept any coins or tokens. You will also need to load tickets into each station's ticket dispenser. See below for loading coins or tokens.

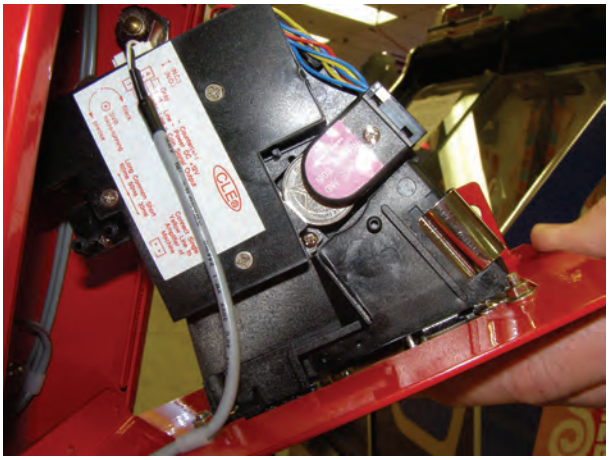
NOTE: RED STATION PICTURES SHOWN BELOW



STEP 1: At each station open the coin door to access the coin comparator.



STEP 2: Pull back the coin holder and insert your coin into the coin slot.



STEP 3: Release coin holder and close coin door.

Card Swipe Installation

The game has been designed for easy integration of any card swipe system. You will find in the cash box all the necessary hardware to install hoppers into each station. Hoppers and harnesses are not included and can be obtained from ICE Service Department.

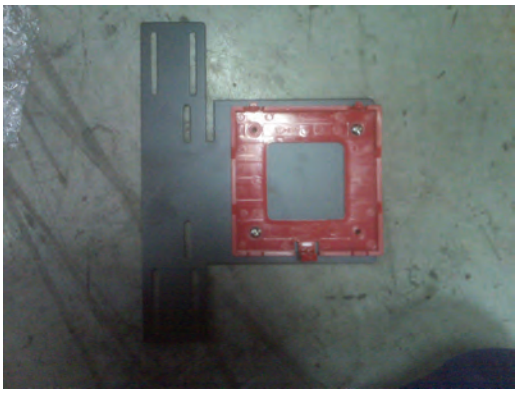
To convert your game to card swipe you will need to install a coin cup and hopper into each station.

Step 1:

Remove the four mounting screws to the front cover of the coin return chute found above each cash box.

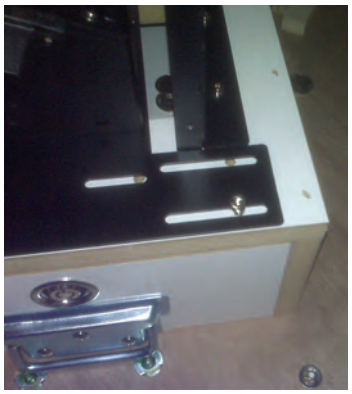
Step 2:

Locate the bottom bracket plate and attach the mount for the hopper with four screws.



Step 3:

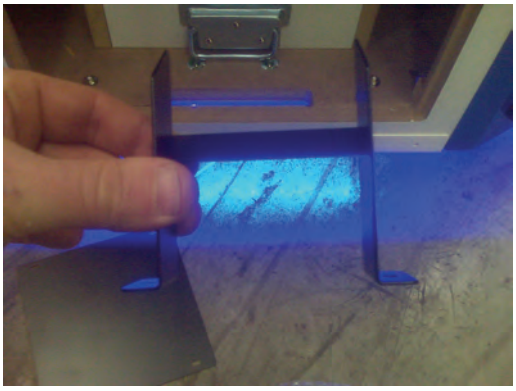
Slide the hopper and bracket assembly into the opening of the coin chute. You will need to slide the assembly back and then to the left to install the four mounting screws shown below.



Card Swipe Installation (*Continued*)

Step 4:

Locate the coin out ramp and position it in front where the coins are dispensed from the hopper and install the two mounting screws.



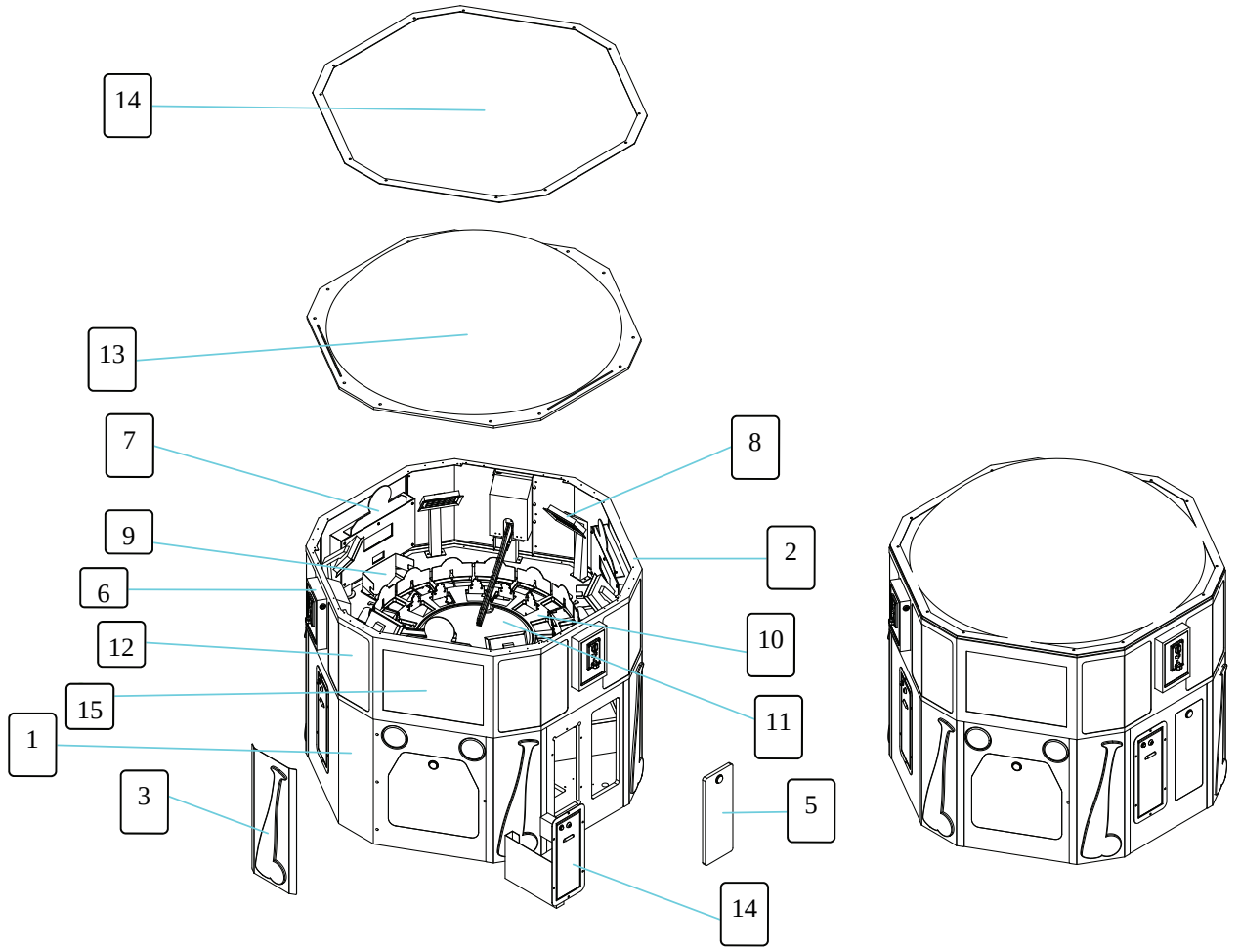
Step 5:

Remove the coin chute plate from the door and install the coin cup with remaining hardware.

The remaining steps to finish your card swipe installation is different per card swipe system used. Refer to your owners manual of your card swipe for further information.

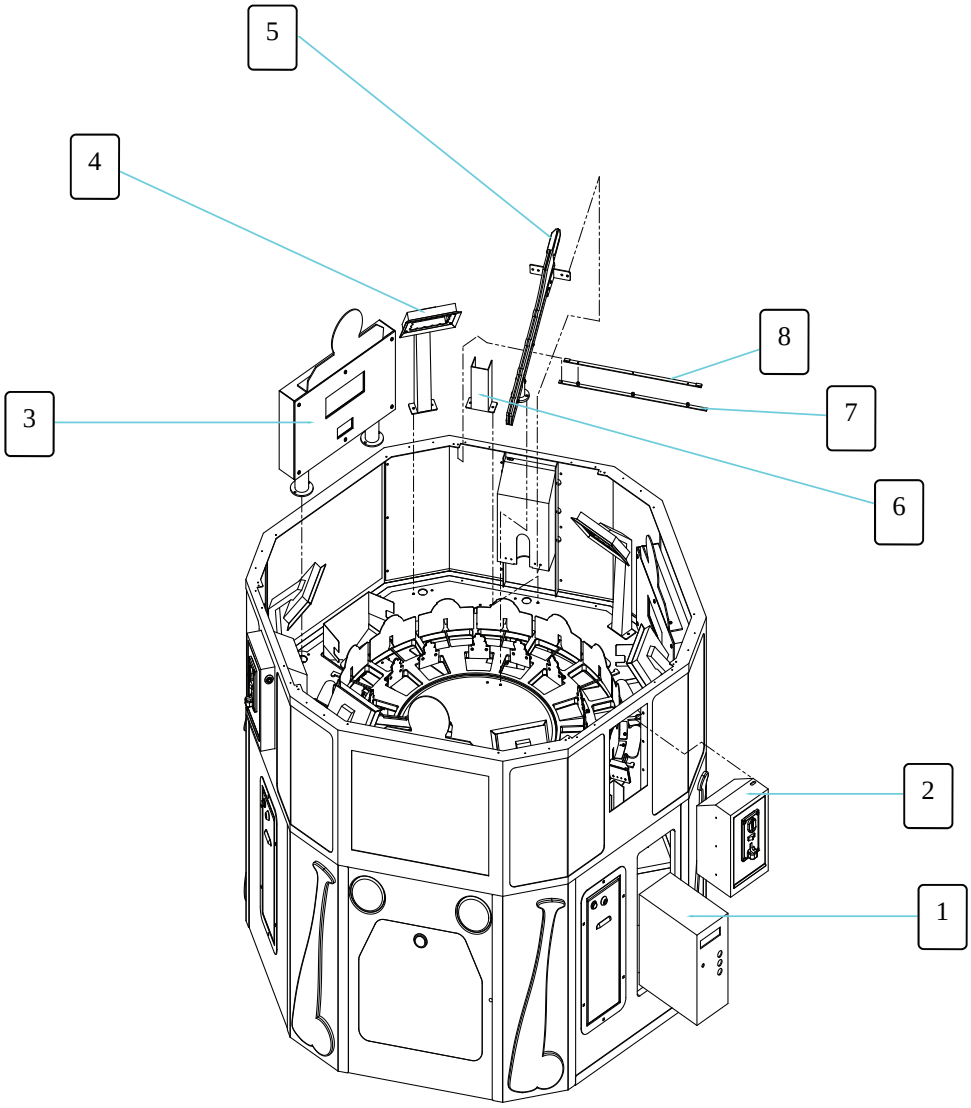
The main logic board can directly control the hoppers. A wire harness from the hoppers to the main board can be purchased form ICE Service Department. The default payout per swipe is 10 coins. This can be adjusted in the games settings. This game also has separate coin and ticket meters for each station located above the main logic board. It is recommended to disconnect the meters and directly connect to your card swipe system. Refer to the wiring diagrams from detail information.

Cabinet Assembly



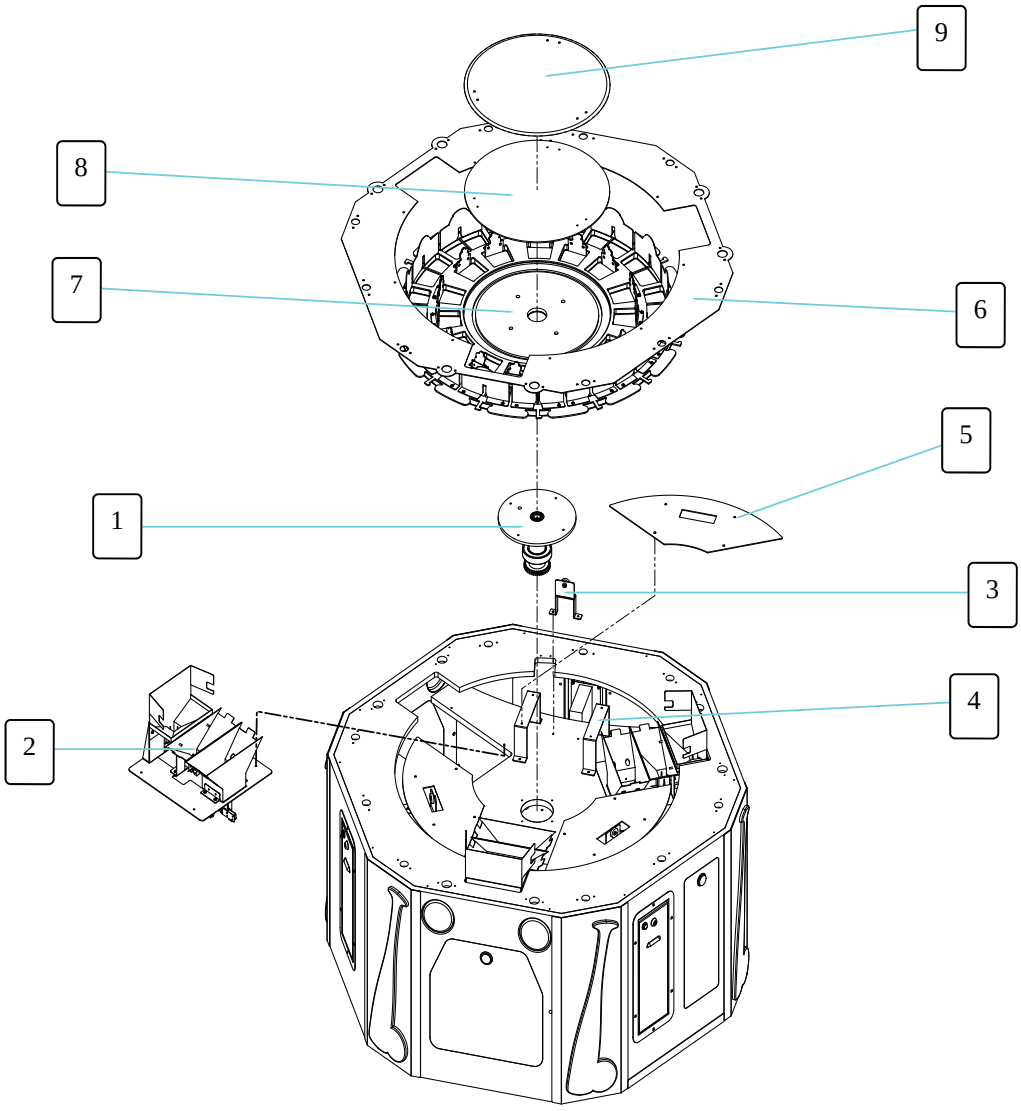
Location	Part number	Description	QTY
1		Lower cabinet	1
2		Upper cabinet	1
3		Lower Bat assembly	6
4		Ticket door assembly	3
5		Main PCB door	1
6		Coin station assembly (Red, blue, yellow)	3
7		Jackpot display assembly (Red, blue, yellow)	3
8		Stadium light assembly	6
9		Coin collector platform assembly	3
10	See page 25	Playfield base plate assembly	1
11		Center acryl playfield	1
12	XHAT3027X	Right and left side window acryl set	6
13	XHAT3001	Acryl dome	1
14		Dome bracket	1
15	XHAT7001HT	Title panel	3

Cabinet Assembly (cont)



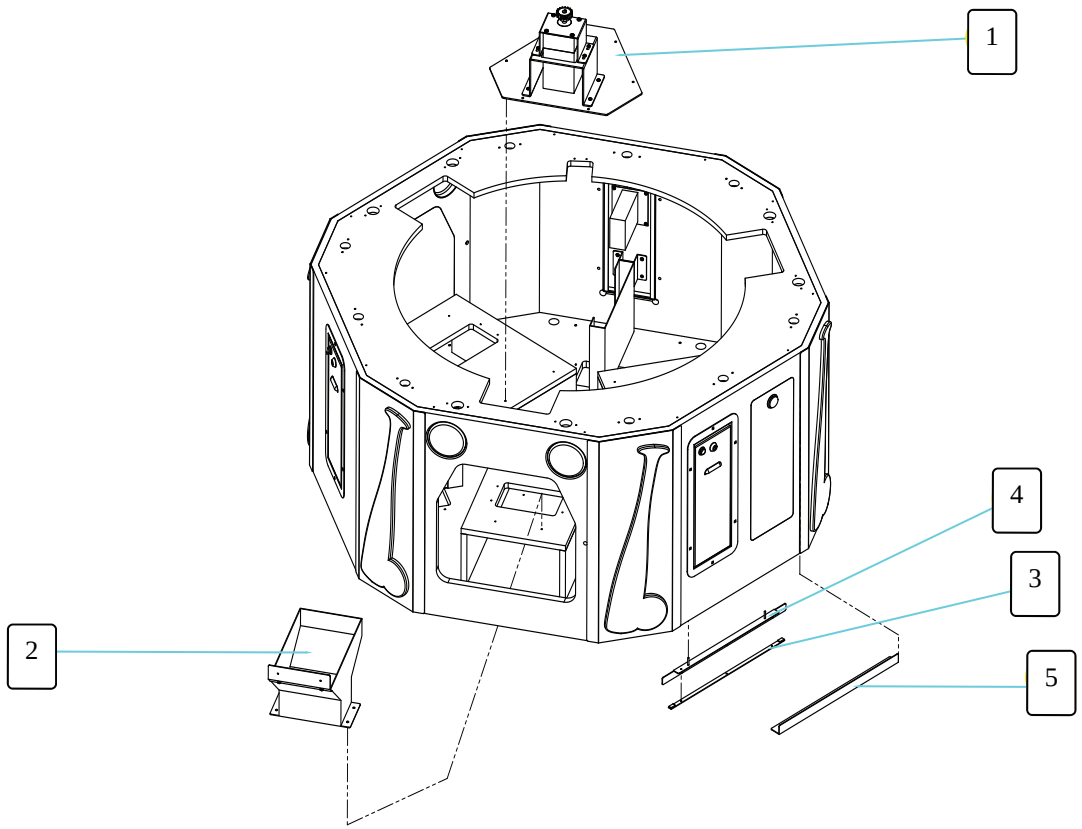
Location	Part number	Description	QTY
1		Main pcb assembly	1
2		Coin station assembly (Red/Blue/Yellow)	3
3		Jackpot display assembly (Red/Blue/Yellow)	3
4		Stadium light assembly (Red/Blue/Yellow)	6
5		Coin chute assembly (Red/Blue/Yellow)	3
6		Coin box cover (Red/Blue/Yellow)	3
7		Dome LED pcb bracket	3
8	XHAT2037X	Dome LED pcb	3

Cabinet Assembly (cont)



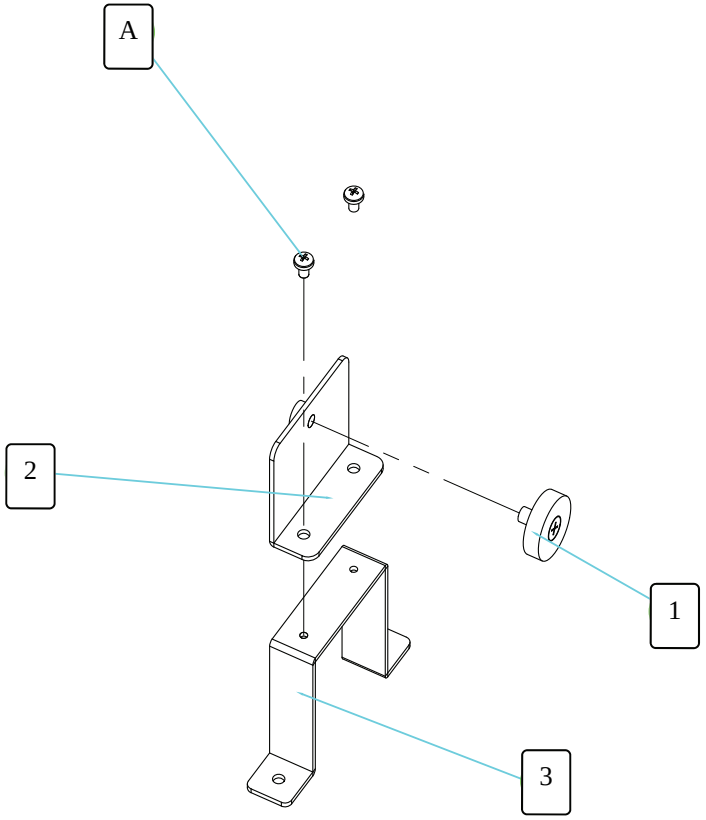
Location	Part number	Description	QTY
1		Main shaft assembly	1
2		Coin collector platform assembly	3
3		Bearing assembly	3
4		Middle cover plate bracket	6
5		Cabinet middle cover plate	3
6	XHAT3025X	Mirror acryl Set (two sizes per each set)	1
7		Playfield base plate assembly	1
8		Playfield base plate	1
9		Center acryl playfield	1

Cabinet Assembly (cont)



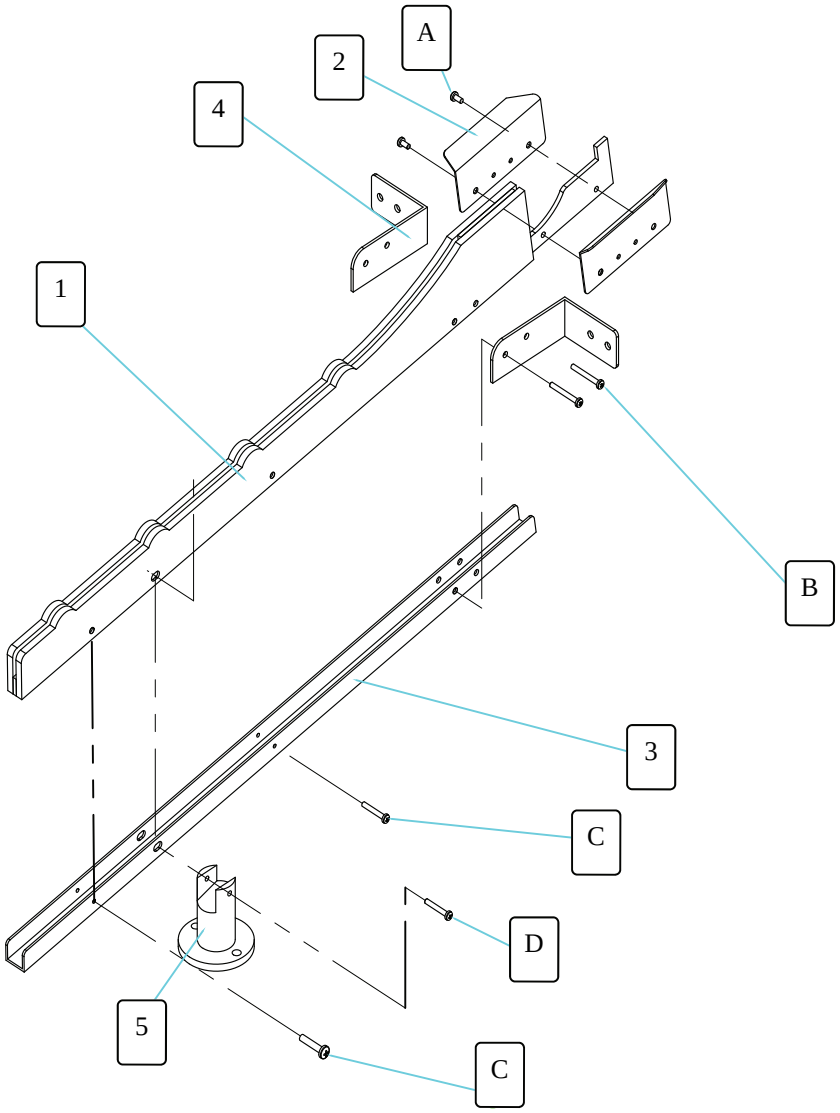
Location	Part number	Description	QTY
1		Motor assembly	1
2		Coin Collection box assembly	3
3	XHAT2038X	Bottom LED PCB	3
4		Bottom LED PCB bracket	3
5		Bottom finish plate	3

Bearing Bracket Assembly



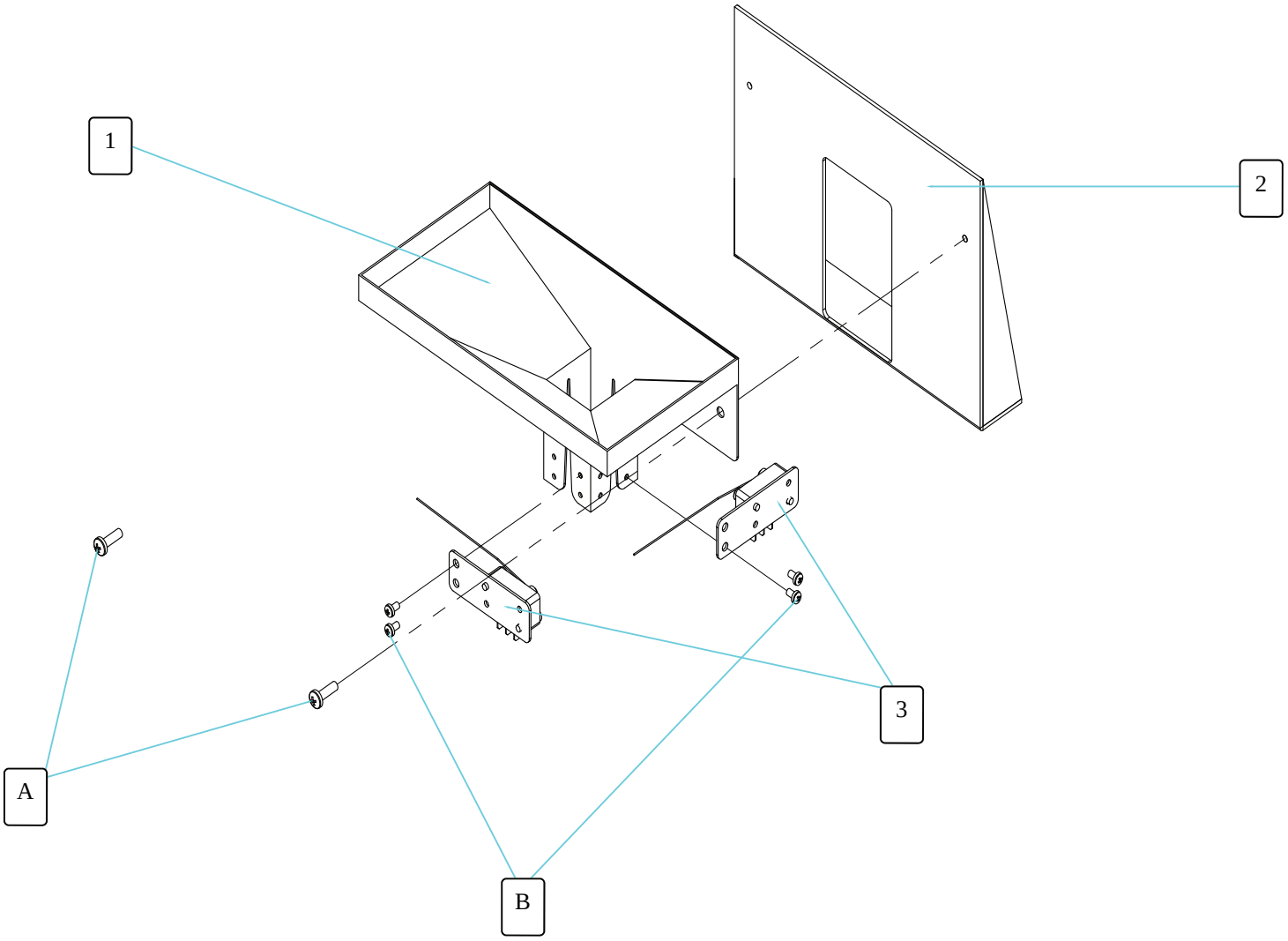
Location	Part number	Description	QTY
1	XHAT1050	Bearing	1
2		Bearing bracket	1
3		Bearing bracket 1	1
4		SEMS machine screw bolt	2

Coin Chute Assembly
(1 each of red, blue and yellow for each station)



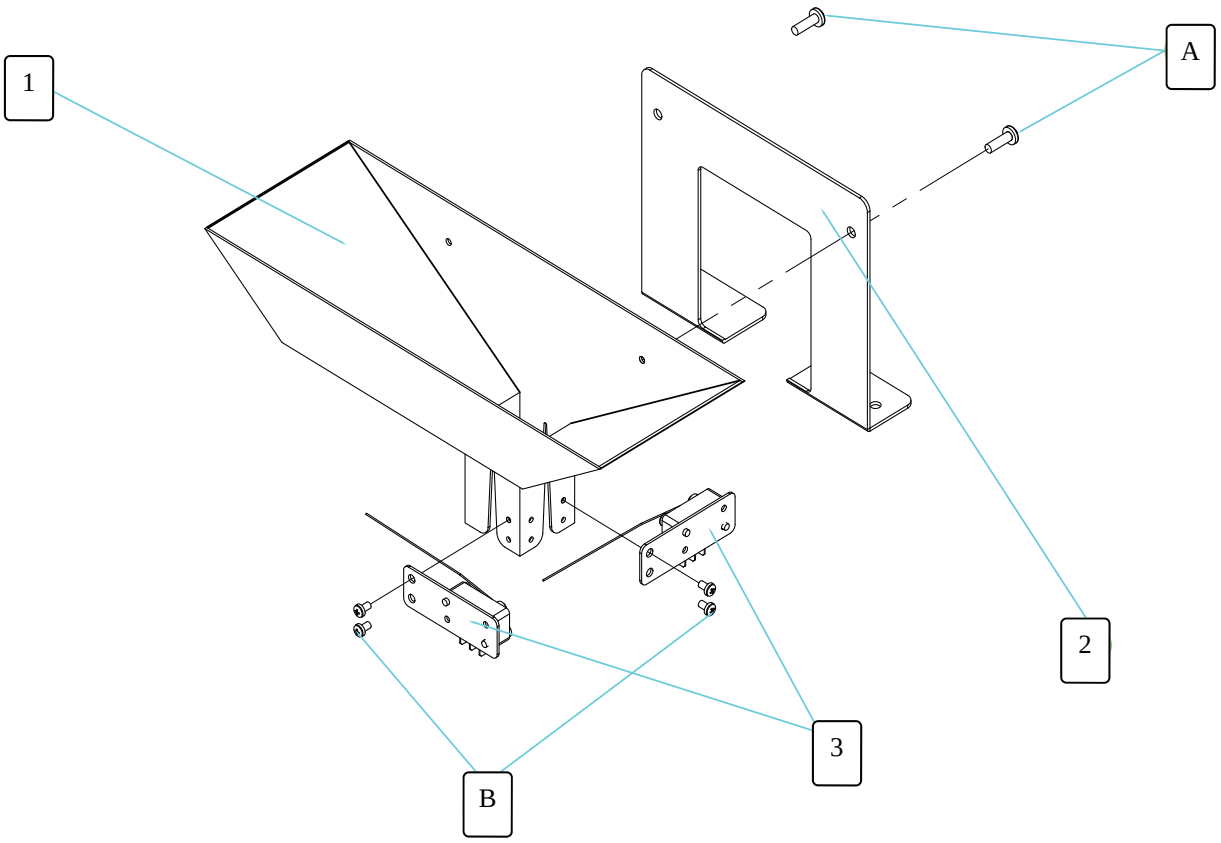
Location	Part number	Description	QTY
1	XHAT3002/3004/3004 (Red, Blue, Yellow)	Coin Chute Acryl (Red, Blue or Yellow stations)	1
2		Coin receiver (Red, Blue or Yellow stations)	2
3		Coin chute bracket (Red, Blue or Yellow stations)	1
4		Coin chute bracket 1 (Red, Blue, or Yellow stations)	1
5		Coin chute support (Red, Blue, or Yellow stations)	1
A		Truss screw bolt	2
B		Truss screw bolt	2
C		Truss screw bolt	2
D		Button head cap screw	1
E		U-lock nut	4

Jackpot Zone Coin Collector Assembly

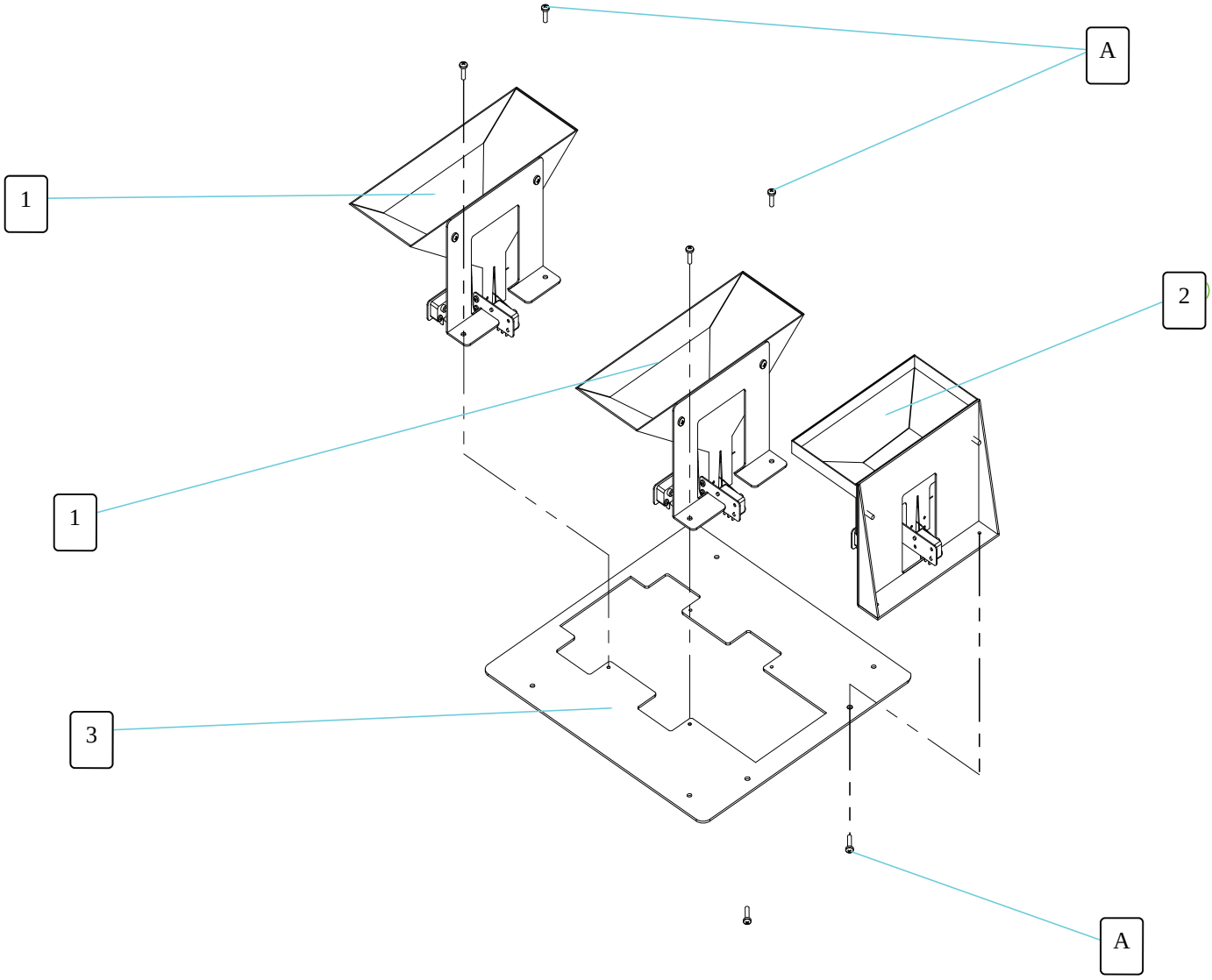


Location	Part number	Description	QTY
1		Jackpot coin collector	1
2		Jackpot coin collector	1
3		Jackpot switch and bracket assembly	2
4		SEMS machine screw bolt	2
5		SEMS machine screw bolt	4

Hit Zone Coin Collector Assembly

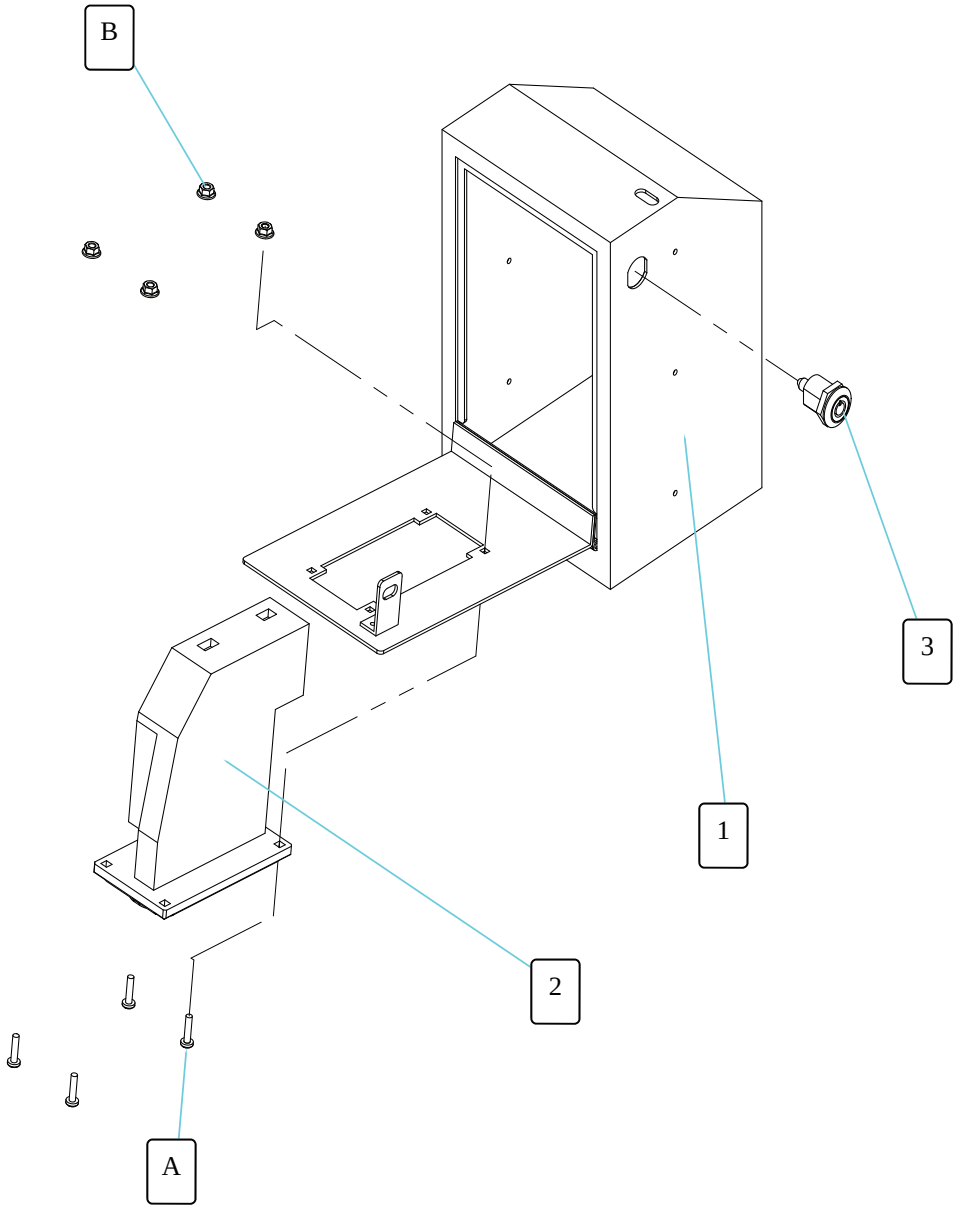


Location	Part number	Description	QTY
1		Hit zone coin collector	1
2		Hit zone coin collector bracket	1
3	XHAT211X	Limit switch assembly	2
4		SEMS machine screw bolt	2
5		SEMS machine screw bolt	4



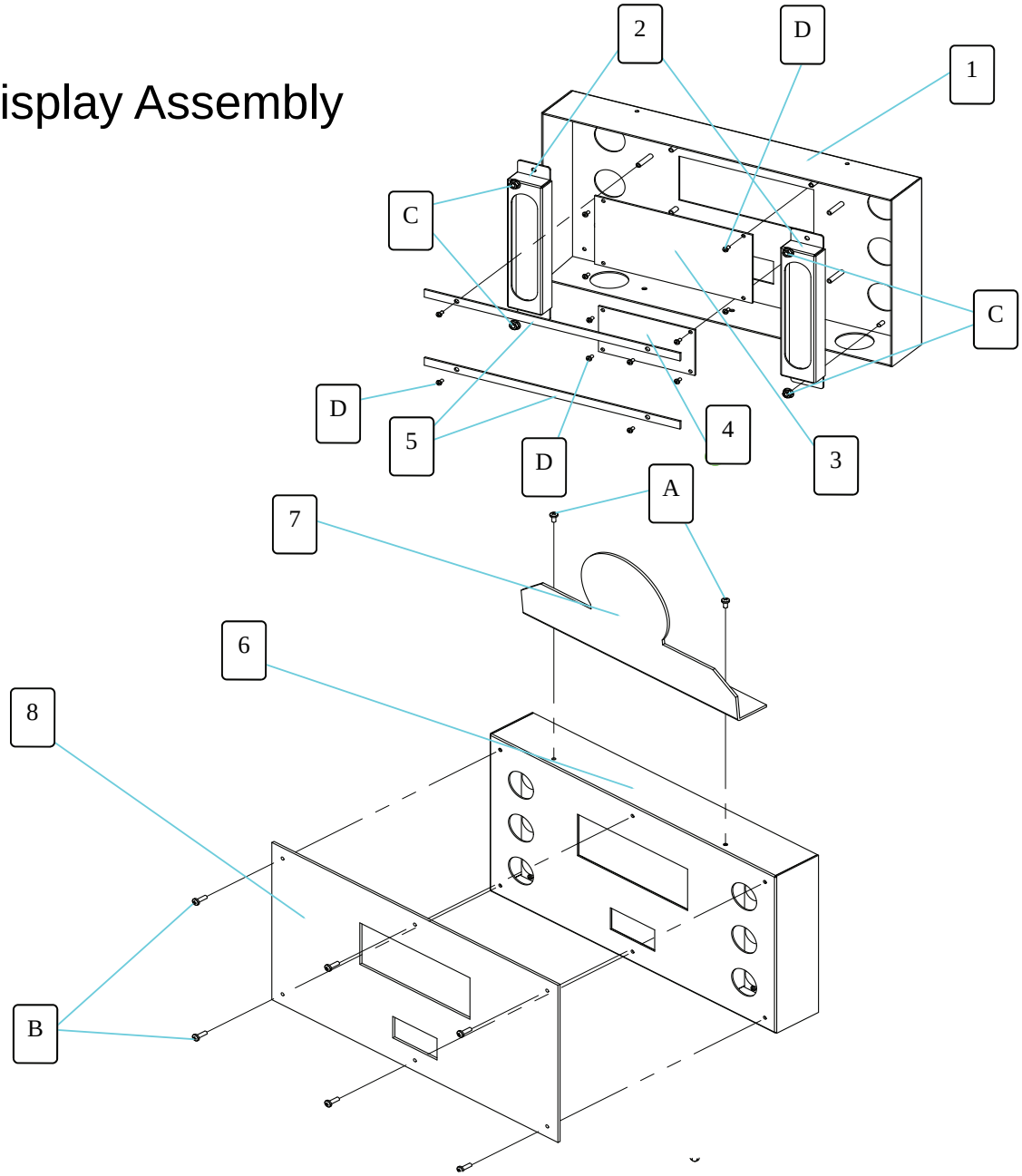
Location	Part number	Description	QTY
1		Hit zone coin collector assembly	2
2		Jackpot coin collector assembly	1
3		Coin collector platform	1
4		SEMS machine screw bolt	6

Coin Station Assembly
(Red, Blue and Yellow)



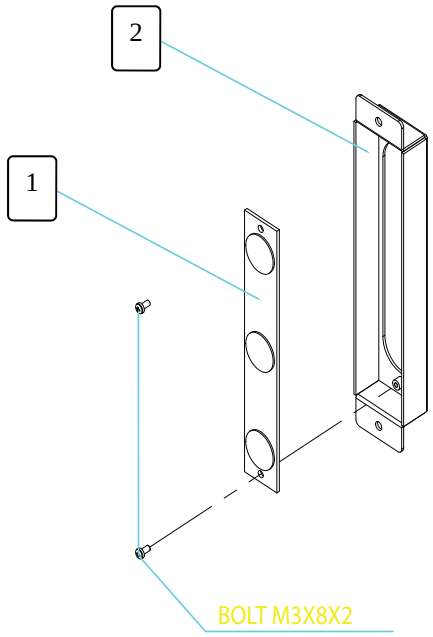
Location	Part number	Description	QTY
1		Coin station box (Red, blue and yellow)	1
2		Coin machine	1
3	XHAT5014	Coin station lock	1
A		Round rivet screw bolt	4
B		Lock nut	4

Jackpot Display Assembly



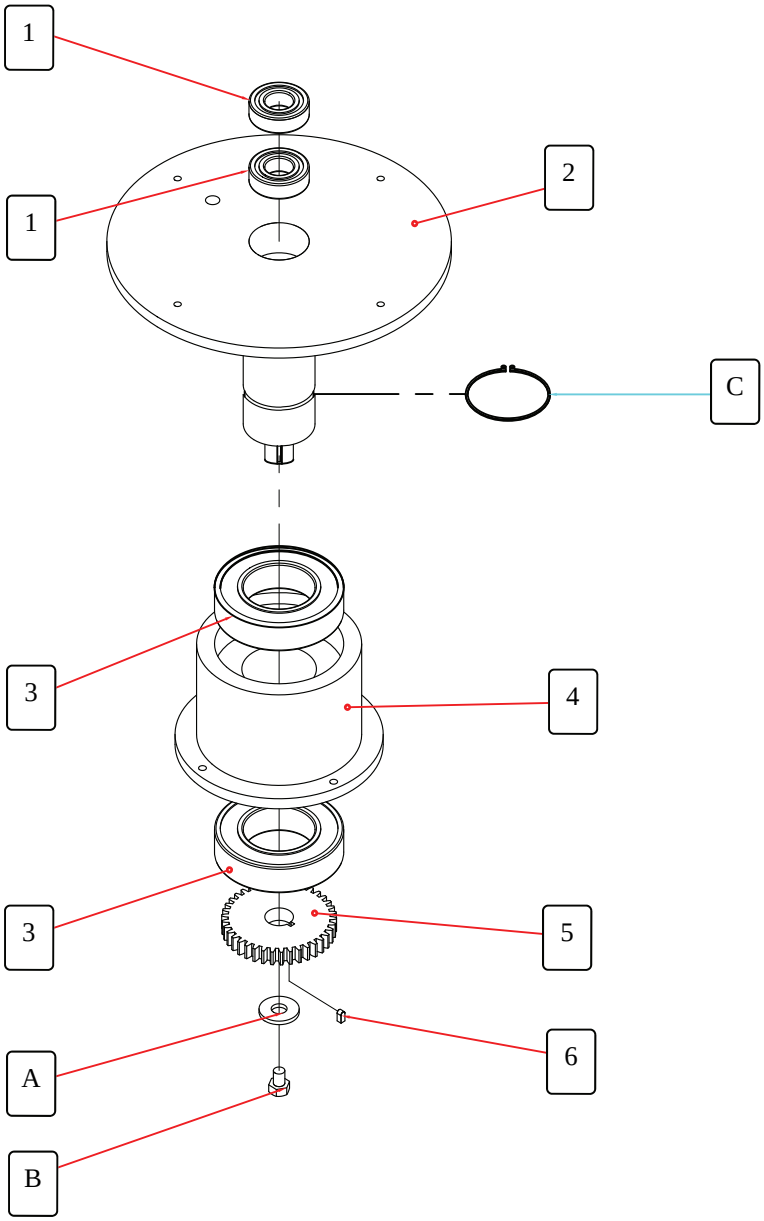
Location	Part number	Description	QTY
1		Jackpot display case	1
2	See page 21	Coin LED pcb assembly	2
3	XHAT2033X	Jackpot FND pcb	1
4	XHAT2032X	Ticket FNC pcb	1
5		Title panel LED pcb	2
6		Jackpot display assembly	1
7	XHAT3006	Acryl pop	1
8	XHAT3007TP	Jackpot display cover	1
A		Truss screw bolt (black)	4
B		Truss screw bolt (silver)	6
C		U-lock nut	4
D		SEMS machine screw bolt	12

Coin LED pcb Assembly
(Available in Red, Blue, or Yellow - Two per color)



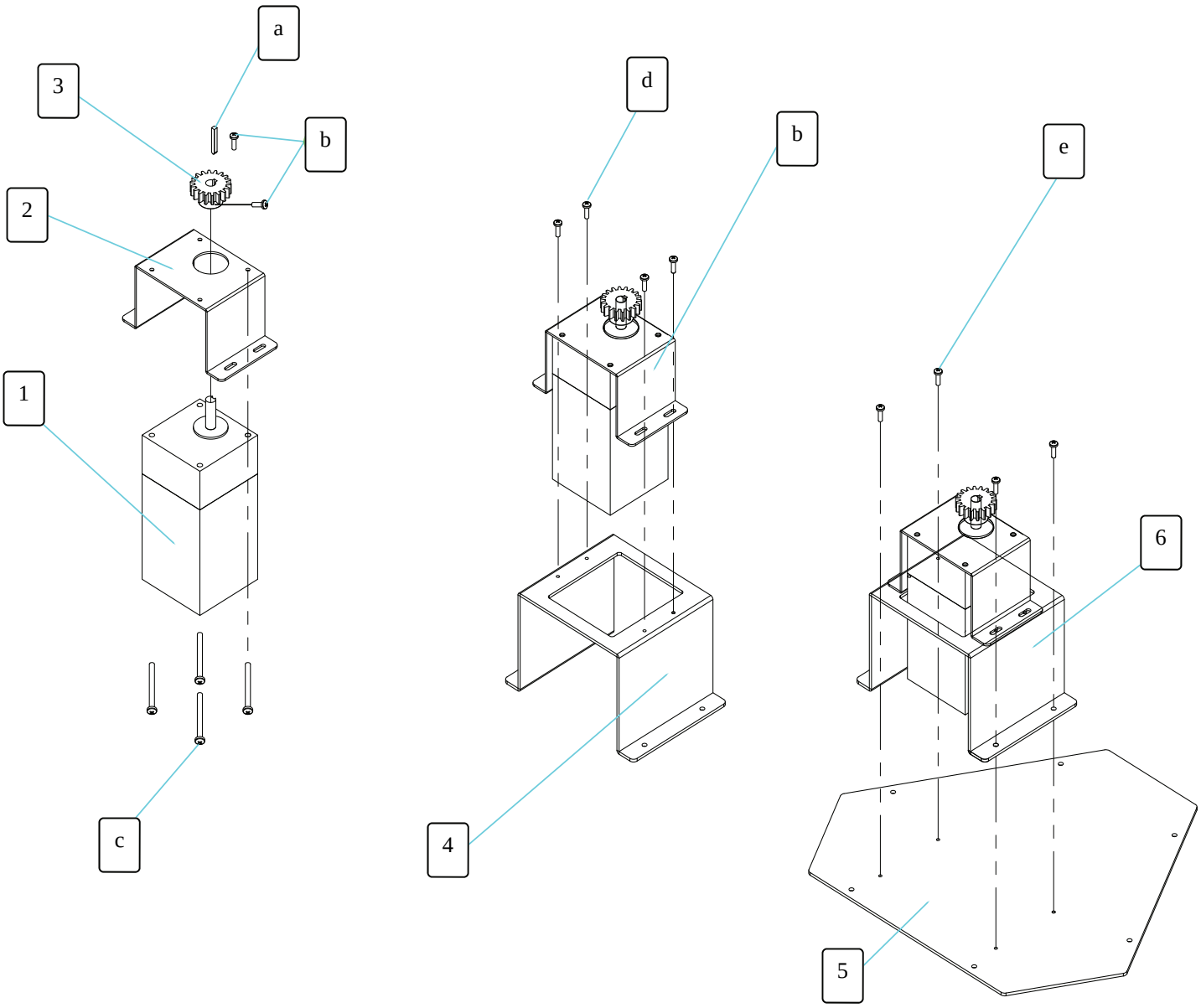
Location	Part number	Description	QTY
1	XHAT2039X/2040X/2041X Red, Blue, Yellow)	Coin LED pcb	6
2		Jackpot display LED pcb cover	6

Main Shaft Assembly



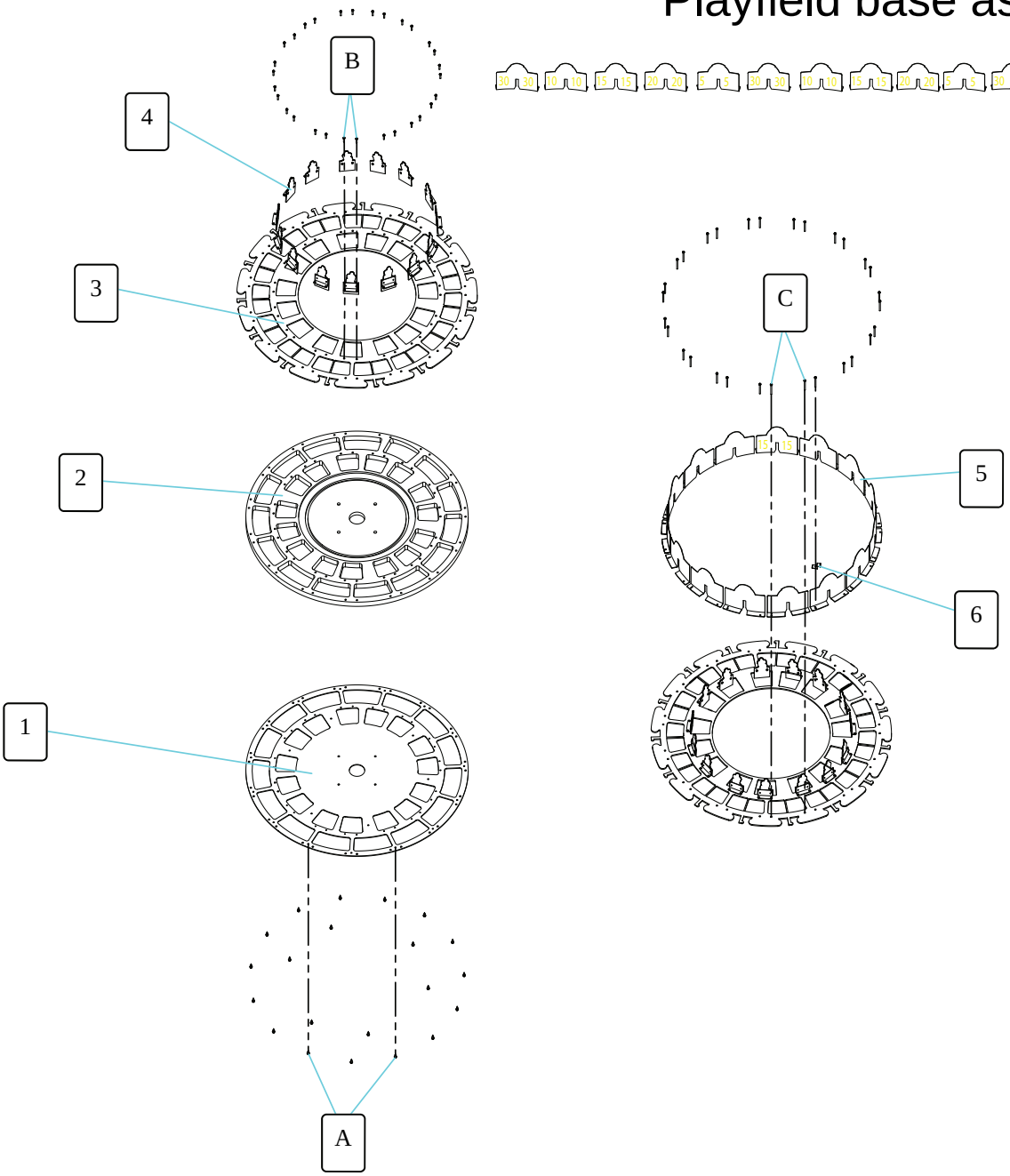
Location	Part number	Description	QTY
1	XHAT1051	Bearing	2
2		Shaft	1
3	XHAT1052	Bearing	2
4		Bearing housing	1
5	XHAT1053	Shaft gear	1
6	XHAT1055	Lock Key	1
A		Washer	1
B		Socket head cap screw	1
C	XHAT1054	C-Ring	1

Motor Assembly



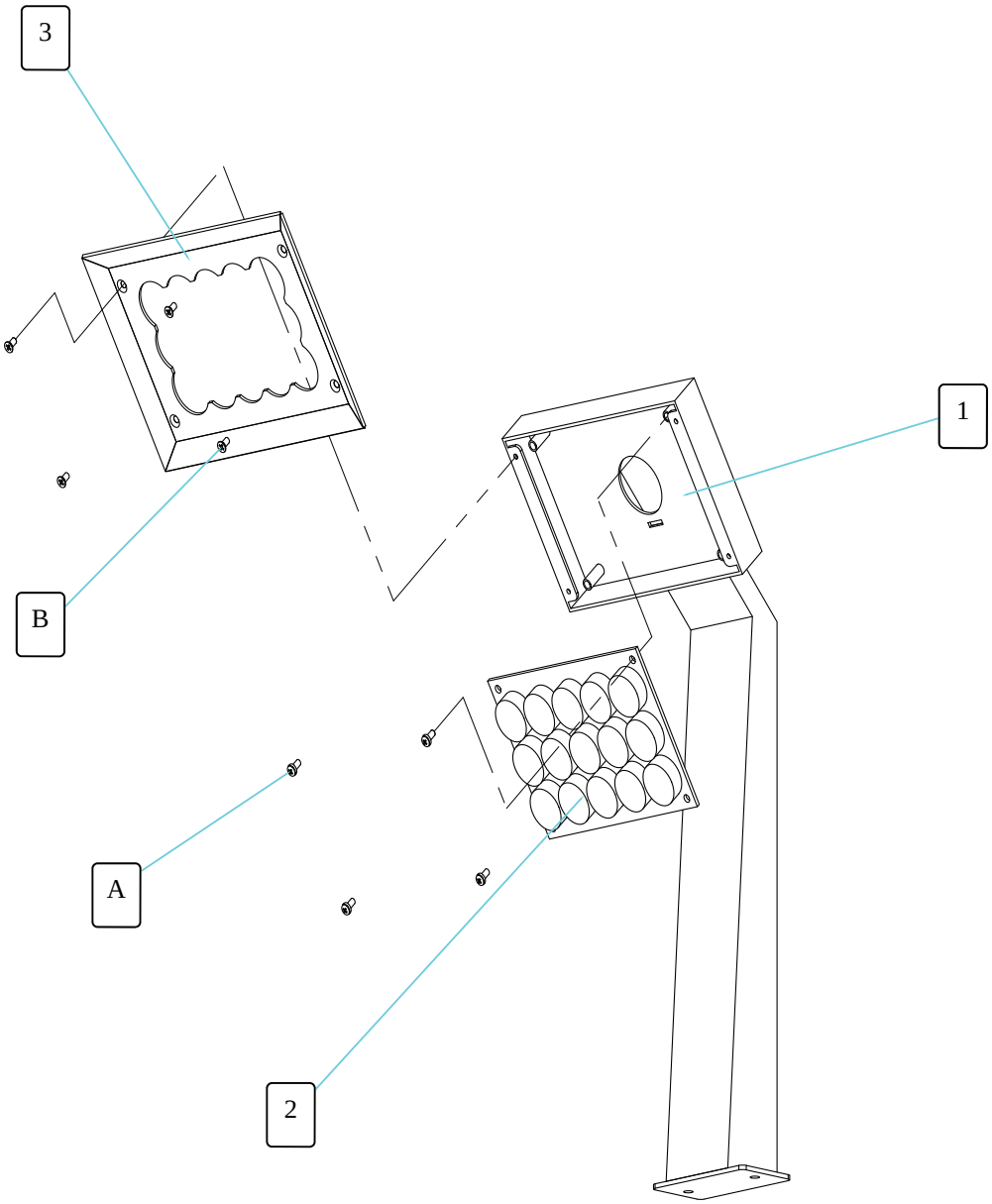
Location	Part number	Description	QTY
1	XHAT2008X	Motor with gearbox assembly	1
2		Motor bracket1	1
3	XHAT1056	Motor gear	1
4		Motor bracket	1
5		Motor base plate	1
6		Motor assembly	1
A	XHAT1057	Lock key	1
B		Socket head cap screw	2
C		SEMS machine screw bolt	1
D		Double SEMS SW+FW mode	4
E		SEMS machine screw bolt	4

Playfield base assembly



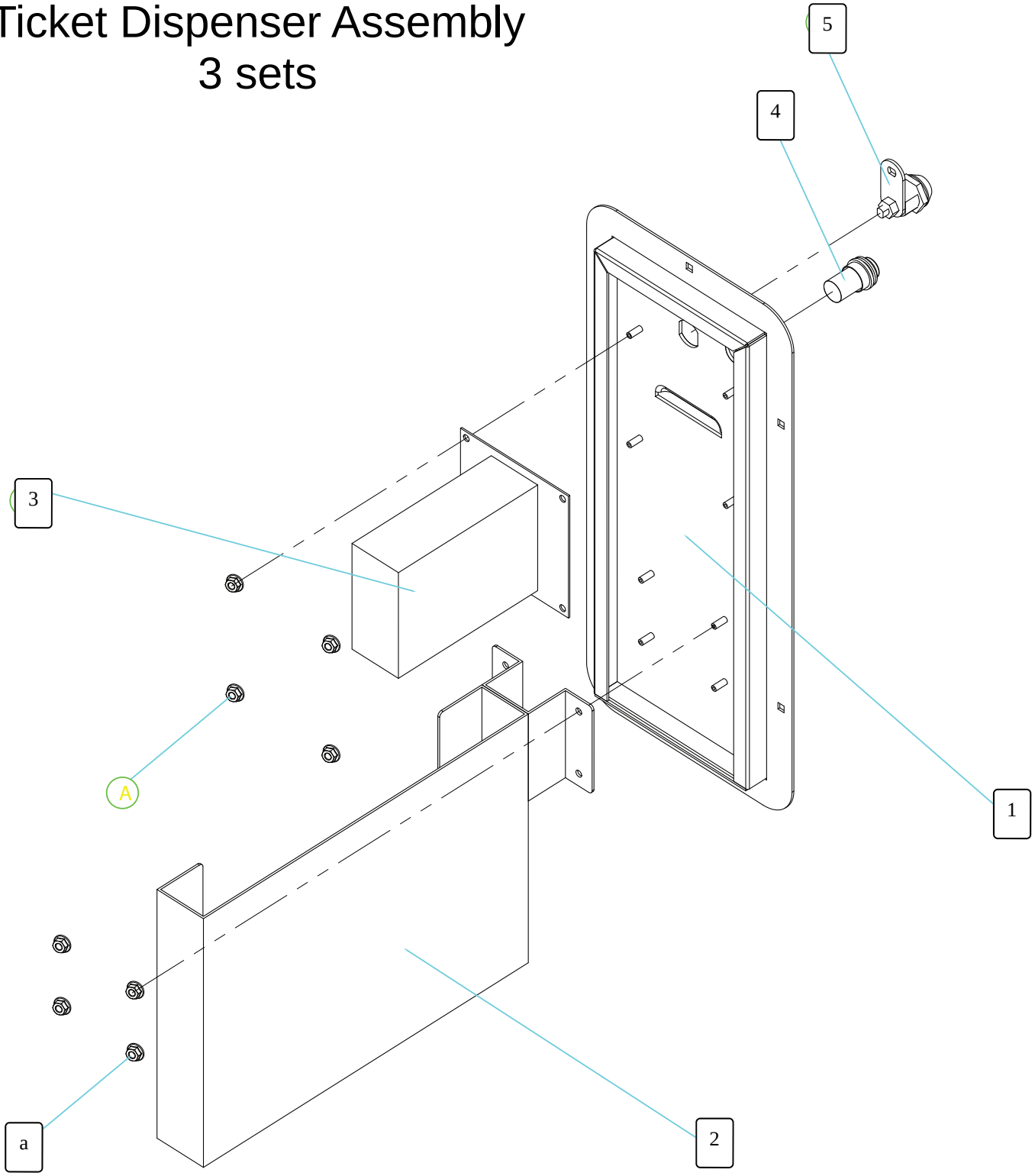
Location	Part number	Description	QTY
1		Playfield base plate	1
2		Playfield base plate	1
3	XHAT7002GENX	Acryl playfield set	1
4		Out zone board	15
5		Score label	15
6		Zero sensor bracket	1
A		Screws bolt	21
B		SEMS machine screw bolt	30
C		SEMS machine screw bolt	30

Stadium Light Supporter assembly



Location	Part number	Description	QTY
1		Stadium light support (red, blue, or yellow)	1
2	XHAT2042X	Stadium light PCB	1
3		Stadium light SUS cover	1
A		SEMS machine screw bolt	4
B		Flat Screw bolt (black)	4

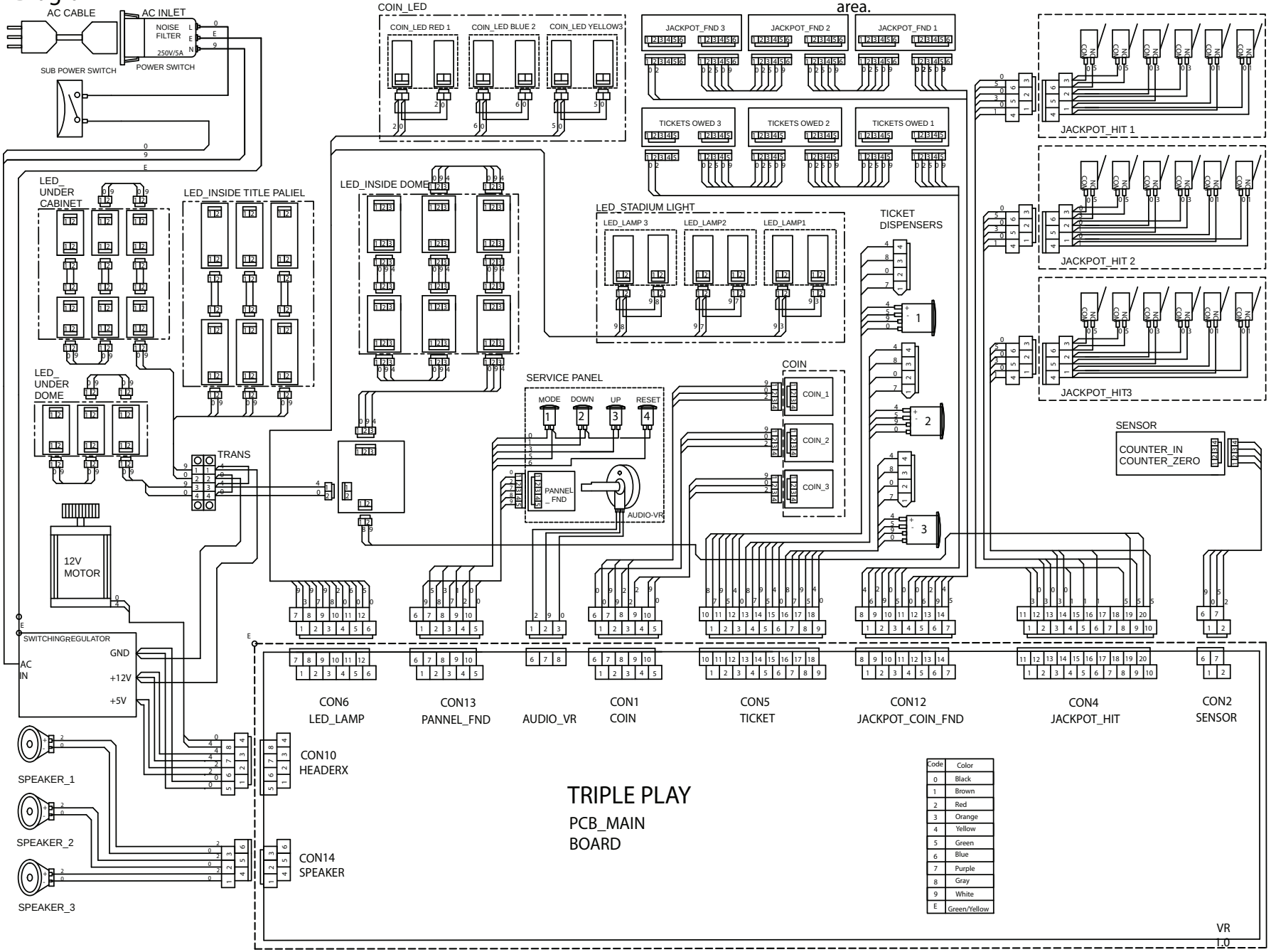
Ticket Dispenser Assembly
3 sets



Location	Part number	Description	QTY
1		Ticket Door	1
2		Ticket Box	1
3		Ticket Dispenser	1
4	XHAT2004	Ticket Button	1
5	XHAT5015	Door Lock	1
A		U-Lock nut	3

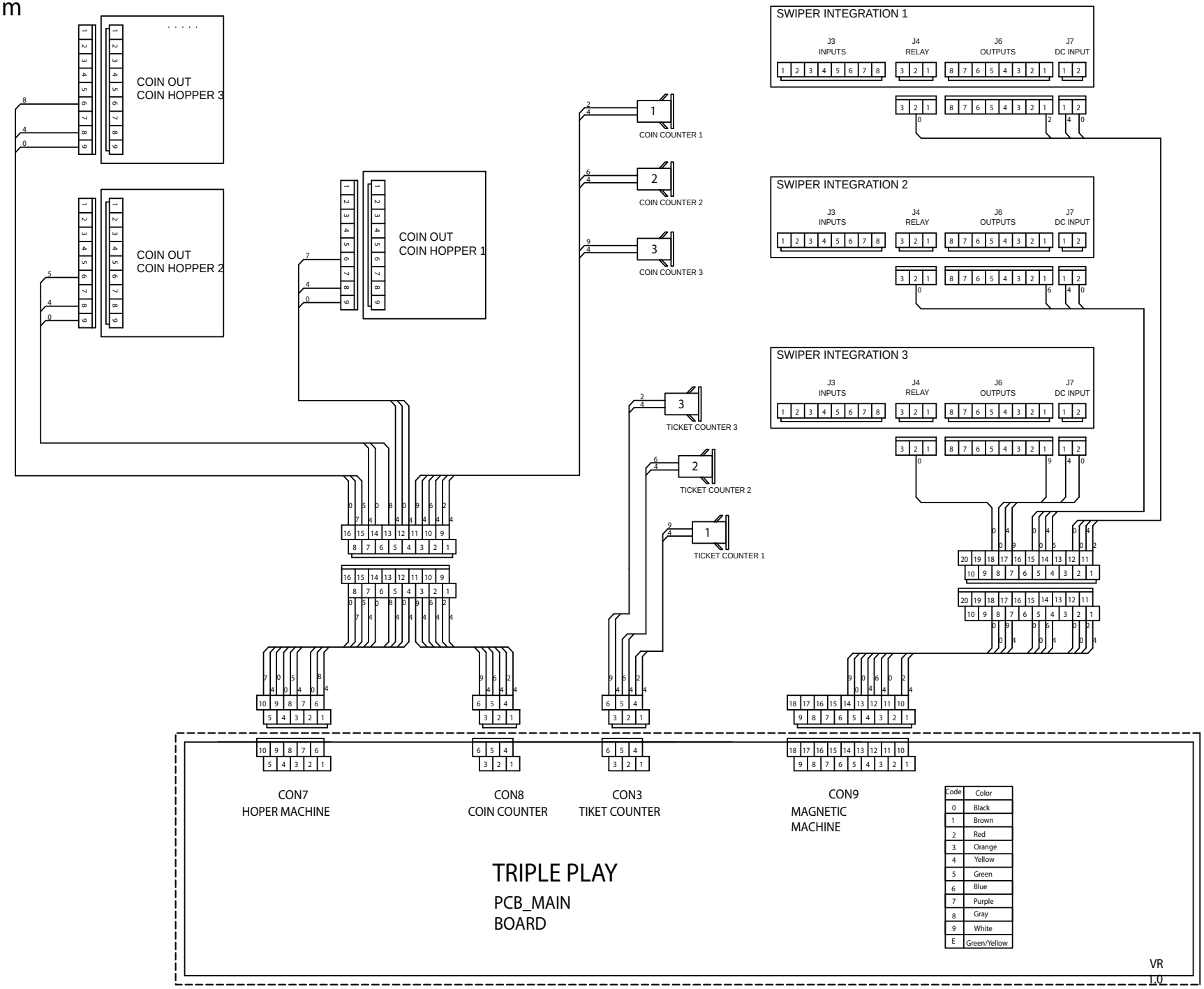
Wiring Diagram

Specifications for regions using 110 voltage area.



Code	Color
0	Black
1	Brown
2	Red
3	Orange
4	Yellow
5	Green
6	Blue
7	Purple
8	Gray
9	White
E	Green/Yellow

Wiring Diagram



Spare Part list

PART NUMBER	DESCRIPTION
XHAT5005	White Button used on main board assembly
XHAT5006	Red button used on main board assembly
SH5001	Coin Comparator
XHAT2005	BUTTON (WHITE)
XHAT2006	BUTTON (RED)
XHAT2007	BUTTON (BLUE)
XHAT2032X	PCBA (TICKET FNC)
XHAT2033X	PCBA (JACKPOT FND)
XHAT2034X	Main board w/out CPU or Eproms
XHAT2036X	PCBA (SENSOR TIMER BOARD)
XHAT2037X	PCBA (DOME LED)
XHAT2038X	PCBA (BOTTOM LED)
XHAT2039X	PCBA (BONUS COIN RED)
XHAT2040X	PCBA (BONUS COIN BLUE)
XHAT2041X	PCBA (BONUS COIN YELLOW)
XHAT2042X	PCBA (STADIUM LIGHTS)
XHAT211X	LIMIT/JACKPOT SWITCH ASY
XHAT3001	DOME
XHAT3002	COIN CHUTE (RED)
XHAT3003	COIN CHUTE (BLUE)
XHAT3004	COIN CHUTE (YELLOW)
XHAT3006	ACRYLIC POP
XHAT3007CEC	JACKPOT DISPLAY COVER (CEC)
XHAT3007TP	JACKPOT DISPLAY COVER (TP)
XHAT3025X	MIRROR SET (3 PIECES)
XHAT3027X	WINDOW SET
XHAT7001HT	TITLE PANEL (HAT TRICK)
XHAT7001TP	TITLE PANEL (TRIPLE PLAY)
XHAT7002BRENX	PLAYFIELD DECAL SET (BRENT)
XHAT7002CECX	PLAYFIELD DECAL SET (CEC)
XHAT7002GENX	PLAYFIELD DECAL SET (GENERIC)
XHAT7002TPX	PLAYFIELD DECAL SET (TRIPLE PLAY)

TITLE

ML1000X SYSTEM SCHEMATIC

BALLAST #CS8449X

NB2035X STROBE LIGHT

NB2032YX display

ML2032YX display

ML2032YX display

DA2133MLX display

SR2035

SPIN ZONE

STRIKE ZONE

ML2039RX FRONT RECEIVER

ML2039RX BACK RECEIVER

ML2039TX BACK TRANSMITTER

ML2039TX FRONT TRANSMITTER

TRANSMITTER

RECEIVER

ML2039TSX

ML2039RSX

DA2133MLX display

DA2133MLX display

RB2009BX opto sensor

FB2008X 12VDC

RB2009BX opto sensor

FB2008X 12VDC

SPEED

MPH

DA2133X display

DA2133X display

E2034X

ML2034X I/O BOARD

DA2002X

MA1019

POWER CORD

POWER ENTRY MODULE DN2007X

INSERT STEP DOWN HERE FOR 220 GAME

INSERT STEP DOWN HERE FOR 220 GAME

DA2001X POWER SUPPLY PCB

FLOOD LIGHT #E00377

FLOOD LIGHT SOCKET #BB2022X

START BUTTON & LIGHT

MZ2005

COIN LAMPS #161 BULB

LOCKOUT COILS

COIN SWITCH 1

COIN SWITCH 2

DBV

CONTROL PANEL

TICKET SWITCH

8212 FLASHING LED

TICKET DISPENSER

ML2032X display

CB2232X display

FLOOD LIGHT #E00377

FLOOD LIGHT SOCKET #BB2022X

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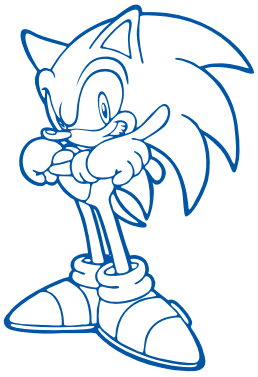

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